

## **REMARKS**

Claims 1-22 are pending in the present application. Claims 1-22 stand rejected. Claims 1-9 and 21 have been amended herein. Claim 21 is amended to place it in allowable form by overcoming the rejection under 35 U.S.C 112 as indicated by the Examiner. Claims 1-9 are amended to render them dependent from claim 21, and to overcome rejection under 35 U.S.C. 112. Claims 10-20 and 22 are canceled. Claims 23-26 are added. Reconsideration is respectfully requested in light of the following remarks. The following remarks are believed to be fully responsive to the outstanding Office action and to render all claims at issue patentably distinct over the cited references.

### **NEW MATTER OBJECTION**

The Examiner objects to the previously-filed amendment under 35 U.S.C. 132 on the grounds that it introduces new matter into the disclosure as detailed below with reference to the written description rejection. This rejection is respectfully traversed.

The Examiner requires cancellation of claim 22. In order to expedite prosecution, Applicant has canceled claim 22. Accordingly, it is respectfully requested that the instant objection be withdrawn.

### **REJECTION UNDER 35 U.S.C. § 112**

#### **FIRST PARAGRAPH**

Claim 22 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement on the grounds that it claims subject matter described in the application in a manner enabling one skilled in the art to practice the invention. This rejection is respectfully traversed.

Applicant has canceled claim 22. Accordingly, it is respectfully requested that the instant objection be withdrawn.

**SECOND PARAGRAPH**

Claims 1-22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

The Examiner remarks that claims 1, 12, 16, and 21 recite subject matter that is not adequately defined in the specification when they recite "inversion capability". The Examiner is incorrect. Notwithstanding, Applicant has amended the claims to remove the objectionable language. Therefore, Applicant respectfully requests the Examiner withdraw the rejection of claims 1, 12, 16, and 21 under 35 U.S.C. § 112, second paragraph, along with rejection of all claims dependent therefrom.

**REJECTION UNDER 35 U.S.C. § 103**

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carver (U.S. Pat. No. 4,309,570) in view of Aronis (U.S. Pat. No. 4,175,466), further in view of *Illustrated Oxford Dictionary*, Oxford University Press, 1998, ISBN 0-7894-3557-8, pages 1557-1559, and yet further in view of Tucker, *The Computer Science and Engineering Handbook*, by Allen B. Tucker, CRC Press, ISBN: 0-8493-2909-4, 1996, pages 1557-1559, and 1354-1360. This rejection is respectfully traversed.

Applicant has amended claim 1 to render it dependent from allowable claim 21. The Examiner has not properly set forth any basis for rejecting claims 10-20; for example, Applicant cannot determine what references and/or statutory section(s) are being used by the Examiner to reject these claims. Thus, if another Office action is

forthcoming, it should not be made final. Nevertheless, Applicant has cancelled claims 10-20.

Applicant respectfully requests the Examiner withdraw the rejection of claim 1 under 35 U.S.C 103(a) on these grounds based on its dependency from an allowable claim. Applicant further requests the Examiner withdraw the rejections of claims 2-9 under 35 U.S.C 103(a) on these grounds based on their dependency from an allowable claim. Applicant further asserts the rejection of claims 10-20 under 35 U.S.C 103(a) on these grounds has been rendered moot.

Claims 2-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carver (U.S. Pat. No. 4,309,570) in view of Aronis (U.S. Pat. No. 4,175,466), further in view of *Illustrated Oxford Dictionary*, Oxford University Press, 1998, ISBN 0-7894-3557-8, pages 1557-1559, yet further in view of Tucker, *The Computer Science and Engineering Handbook*, by Allen B. Tucker, CRC Press, ISBN: 0-8493-2909-4, 1996, pages 1557-1559, and 1354-1360, still further in view of Logue (U.S. Pat. No. 6,279,379), yet still further in view of Routine Expedient (MPEP § 2144.04(VI)(C), (rearrangement of parts), even further in view of Applicant's alleged admission, and even still further in view of Sakai (U.S. Pat. No. 6,526,849). This rejection is respectfully traversed.

Applicant has amended claim 1 to render it dependent from allowable claim 21. Applicant respectfully requests the Examiner withdraw the rejection of claims 2-9 under 35 U.S.C 103(a) on these grounds based on their dependency from an allowable claim. Applicant further asserts the rejection of claims 10-20 under 35 U.S.C 103(a) on these grounds has been rendered moot.

Claims 17-20 stand rejected under 35 U.S.C. § 103(a) based on Sims (U.S. Pat. No. 5,206,913) in view of Tucker, *The Computer Science and Engineering Handbook*, by Allen B. Tucker, CRC Press, ISBN: 0-8493-2909-4, 1996, pages 1557-1559, and 1354-1360, further in view of Applicant's alleged admission, still further in view of *Illustrated Oxford Dictionary*, Oxford University Press, 1998, ISBN 0-7894-3557-8, pages 1557-1559, Oxford University Press, 1998, ISBN 0-7894-3557-8, pages 1557-1559, yet still further in view of Krauss (US Patent No. 2,806,953), and even still further in view of Aronis (US Patent No. 4,175,466). This rejection is respectfully traversed.

Applicant has cancelled claims 17-20. Applicant respectfully asserts that the rejection of claims 17-20 under 35 U.S.C 103(a) on these grounds has been rendered moot.

Furthermore, the Examiner's alleged interpretation and definitions of various claim elements is traversed as being overly narrow and unnecessary since the claim elements are not ambiguous. Also, the examiner's assertions about Routine Expedients is respectfully challenged as lacking support. Furthermore, the references applied by the Examiner do not contain the requisite suggestion or motivation necessary to show obviousness of the claimed invention. Reconsideration is respectfully requested.

#### **ALLOWABLE SUBJECT MATTER**

The Examiner states that claim 21 would be allowable if rewritten to remove the third limitation, and to amend the first and second limitations to replace the phrase "wherein varying piston diameters are selected based on varying surfaces of the ... assigned instrument" with the phrase "wherein a front piston diameter and a rear piston

diameter are chosen to respectively reproduce a forward and rear frequency dependence and polar radiation pattern of the ... assigned instrument". Accordingly, Applicant(s) have amended claim 21 as directed by the Examiner. Therefore, claim 21 should now be in condition for allowance.

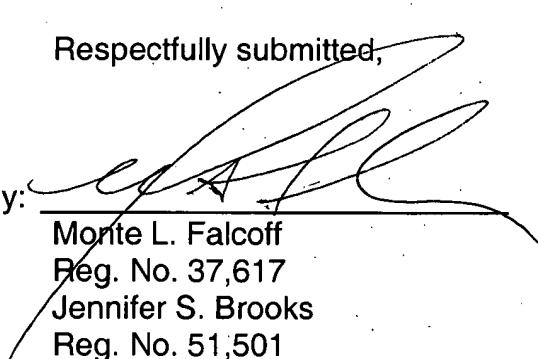
**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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